



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[3518]
Machine Id
VOLVO L90H 624200
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP319714	VCP208018	---
Sample Date		Client Info		15 Sep 2021	08 Jun 2018	---
Machine Age	hrs	Client Info		3468	531	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	36	---
Chromium	ppm	ASTM D5185m	>10	<1	3	---
Nickel	ppm	ASTM D5185m	>10	<1	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>10	4	8	---
Lead	ppm	ASTM D5185m	>20	<1	<1	---
Copper	ppm	ASTM D5185m	>15	<1	7	---
Tin	ppm	ASTM D5185m	>10	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

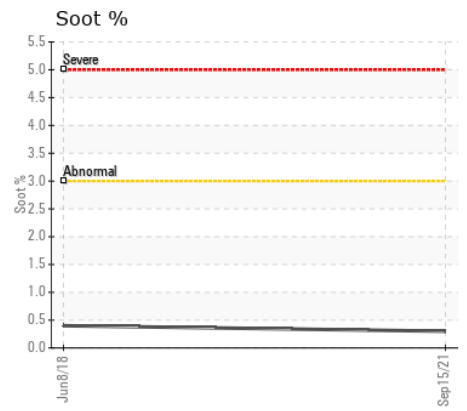
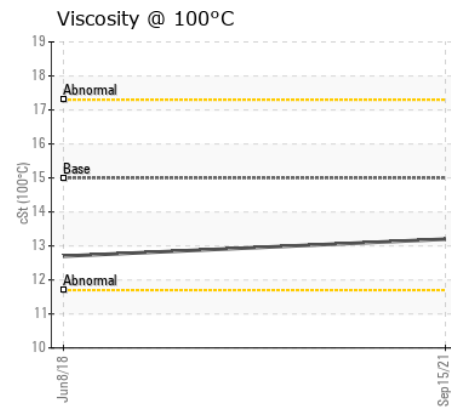
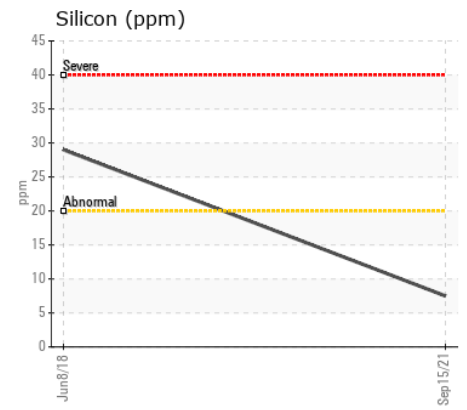
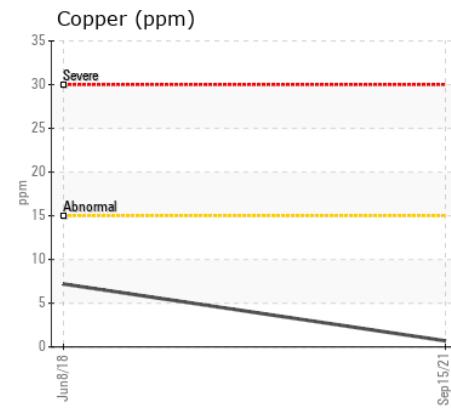
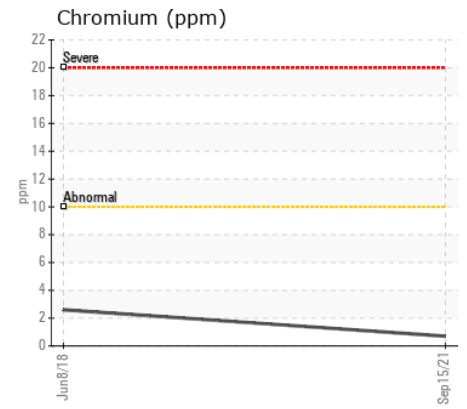
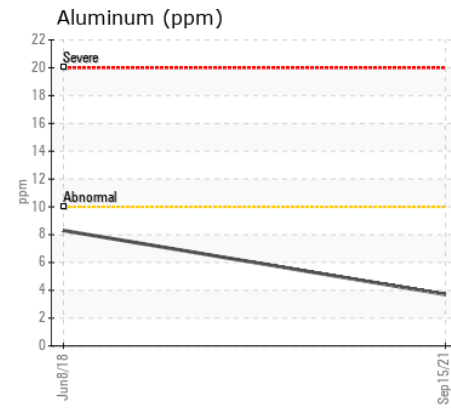
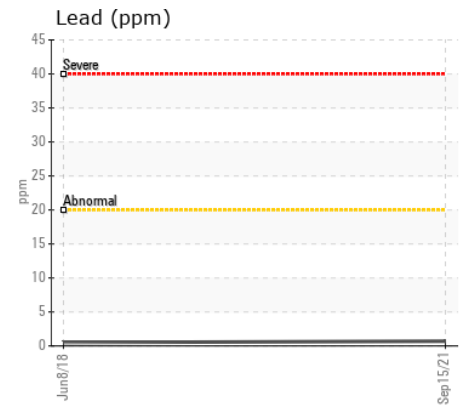
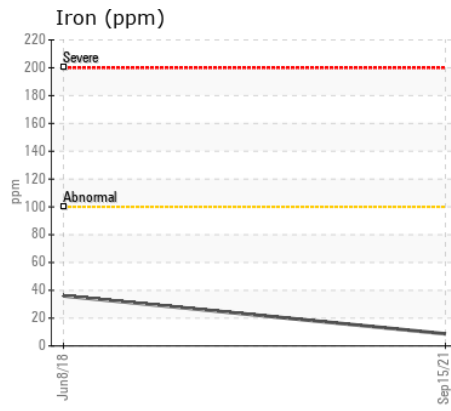
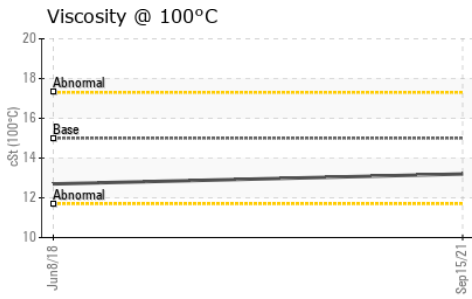
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	8	29	---
Potassium	ppm	ASTM D5185m	>20	0	12	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	8.2	8.	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	22.	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	4	---
Boron	ppm	ASTM D5185m	2.5	39	42	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.7	40	30	---
Manganese	ppm	ASTM D5185m	0.0	<1	5	---
Magnesium	ppm	ASTM D5185m	256	521	523	---
Calcium	ppm	ASTM D5185m	2057	1704	1519	---
Phosphorus	ppm	ASTM D5185m	935	940	756	---
Zinc	ppm	ASTM D5185m	1223	1182	919	---
Sulfur	ppm	ASTM D5185m	4079	2683	2820	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	20.	---
Visc @ 100°C	cSt	ASTM D445	15.0	13.2	12.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP319714 **Received** : 21 Sep 2021
Lab Number : 05355764 **Diagnosed** : 22 Sep 2021
Unique Number : 9669857 **Diagnostician** : Wes Davis
Test Package : MOB 1

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)